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NAVY HEALTH AND PHYSICAL READINESS PROGRAM IMPLEMENTATION: A SURVEY OF COMMAND FITNESS COORDINATORS

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**Navy Health and Physical Readiness Program Implementation:
A Survey of Command Fitness Coordinators**

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Executive Summary

Problem

The Navy emphasizes the need for strong command-level health and fitness programs, along with good leadership by example, to meet long-term goals of the mandated Health and Physical Readiness (HAPR) Program. There is, however, no specific guidance regarding the types of programs that commands might implement. Thus, it is likely that there is a high degree of variability across commands with respect to health promotion efforts.

Objective

This study surveyed command fitness coordinators (CFCs) to assess factors which indicate the extent to which HAPR programs and activities are being implemented at Navy commands.

Approach

Participants were CFCs from 83 randomly-selected commands representing a cross-section of all Navy commands. The 83 CFCs completed questionnaires concerning four main areas of HAPR implementation: (a) physical readiness test (PRT) procedures and remedial programs, (b) types of HAPR-related activities, policies, programs, and facilities available, (c) foods available on-site, and (d) HAPR-related perceptions of the commanding officer and executive officer. Differences between ship and shore communities were also examined.

Results

All but one of the commands surveyed conducted the required PRT, but more than 20% lacked remedial programs for those who failed the test. The most commonly available exercise equipment/facilities were weights and playing fields/courts/tracks. Although facilities were usually well-maintained, and exercise programs or group sports were often available, many commands allowed little or no time for exercise during the work day. Only 18% of the CFCs reported that personnel at their commands typically exercised regularly. Most commands provided some education about nutrition and weight control, yet low-fat, high-fiber foods were not available at many commands, nor were dieter's portions; vending machine snack foods were typically sugary and fatty, with few healthful alternatives. CFC ratings of their top-level officers (in terms of their fitness behaviors and attitudes) were generally favorable. However, about 17% of the CFCs said that their COs did not exercise regularly, were overweight, and did not provide strong support for either the CFC or the HAPR

Program. Moreover, 21% of COs were smokers, and less than half actively discouraged smoking among command members. Shore commands provided more exercise programs and facilities; otherwise, ship and shore communities were similar--an important exception being that smoking policies and leadership were stricter among shore commands.

Conclusions

While the CFC survey indicated fairly widespread implementation of health promotion programs and activities, the HAPR effort could be improved in several respects. These include expanding remedial programs, providing time during the work day for exercise, enforcing smoking restrictions, making nutritious and "diet-conscious" food items more widely available, and encouraging strong leadership and support at the top command levels.

**Navy Health and Physical Readiness Program Implementation:
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Terry L. Conway, Linda K. Trent, and Terry A. Cronk.

Introduction

In 1982 the office of the Chief of Naval Operations established the Navy's Health and Physical Readiness (HAPR) Program in recognition of the need for active promotion of healthful life-styles and reduction of health risks among Navy personnel.^{1,2} This program, in conjunction with the Navy's overall health promotion program³ and the Chief of Naval Operations' "Personal Excellence and National Security" program⁴, provides strong support of efforts in the areas of exercise and sports, weight control/nutrition, smoking prevention and cessation, hypertension education and control, stress management, alcohol and substance abuse prevention, and back injury prevention. The Navy emphasizes the need for strong command-level health and fitness programs and stresses the importance of good leadership by example in the areas of health and fitness. The Navy also recognizes the need to encourage personal motivation for improving one's own health and fitness, as well as providing incentives whenever possible to enhance the development and maintenance of high levels of physical readiness and healthful life-styles among Navy personnel.

Meeting long-term HAPR Program goals will depend largely on the effective implementation of health and fitness activities at the level of individual commands. The Navy has set specific requirements for meeting minimum standards for physical fitness and body composition (percentage of body fat). Furthermore, remedial programs for those who fail to meet minimum standards are required. However, beyond these basic requirements, it is up to individual commands to implement (or not) specific programs or activities in support of the Navy's HAPR goals. Thus, the importance of additional command-level health promotion efforts which encourage individuals to improve their physical fitness and reduce health risks needs to be emphasized because command-level efforts are likely to have the greatest direct impact on people.

Although HAPR Program instructions strongly encourage command-level health and fitness activities, there is currently no specific guidance about the types or quantities of programs that commands might implement. This lack

of program standardization means that there is likely to be a high degree of variability across commands with respect to health promotion efforts. The purpose of this report is to examine a variety of factors which indicate the extent to which HAPR programs and activities are being implemented at a cross-section of Navy commands.

Methods

Participants

Participants were command fitness coordinators (CFCs) from 83 of 110 commands participating in a Navy-wide evaluation of the HAPR Program. All Navy commands are required to appoint CFCs who are responsible for assuring that the medical screening and physical readiness test (for those not medically waived) are conducted each year for all command personnel.^{1,2} Forty-nine percent of the participating CFCs were enlisted personnel and 51% were officers. Ten percent were E-5's, 11% E-6's, 18% E-7's, 7% E-8's, 3% E-9's, 7% CW0-4's, 1% O-1's, 9% O-2's, 21% O-3's, 2% O-4's, 6% O-5's, and 5% O-6's.

Command Sampling Procedures

Originally, 119 command units (UICs) were randomly selected from approximately 5,000 existing in the Navy. In selecting these 119 commands, a stratification procedure based on command size was employed. This was done to ensure that the final sample of identified participants would appropriately represent the actual percentages of individuals at commands of varying sizes throughout the Navy. Also, no commands with fewer than 10 individuals were considered for selection; this sampling restriction eliminated less than 1% of the Navy's total force. No other stratification procedures were used for selecting commands.

The commands selected represented a cross-section of all Navy commands, as they were randomly selected from all the UICs that existed in the Navy during 1985. Agreements to participate were received from 110 of the 119 originally targeted units: five transient personnel commands did not conduct the physical readiness test and, therefore, could not participate; one submarine was decommissioned; one fighter squadron had conflicting operational demands; one shore command and one aerial refueler squadron could not accommodate study requests.

CFC Survey Questionnaire

The CFC Survey was comprised of questions which fell into four primary categories: (a) physical readiness testing procedures and remedial programs, (b) types of HAPR-related activities, policies, facilities, equipment, etc., (c) foods available on-site, and (d) HAPR-related perceptions of the commanding officer and the executive officer. CFC surveys were sent to the 110 commands participating in the Navy-wide evaluation of the HAPR Program during the fall of 1986. Thus, responses reflect implementation of HAPR programs still under OPNAVINST 6110.1B¹, as OPNAVINST 6110.1C² did not become effective until October 1987. A complete copy of the survey is included as Appendix A.

Results

Physical Readiness Testing

As shown in Table 1, a majority (58.6%) of the CFCs reported that their commands conducted the physical readiness test (PRT) more than once per year, even though the requirement at the time of the survey was for an annual test. Almost 90% of the CFCs reported that at least 75% or more of the personnel at their commands took the PRT each year. The most common reasons given for why some individuals did not take the PRT were: (a) TAD (temporary additional duty) during testing (6.5%), (b) "no show" for testing (6.3%), and (c) medical waiver (6.0%). Less than half (41%) of the CFCs said their commands offered incentives to members for passing the PRT at the highest ("outstanding") level, and only 19% of commands offered incentives for performance at any other level or for showing big improvements in performance. However, 78% of CFCs did say that there were "negative consequences" for failing the PRT. CFCs reported an average of 79 (SD=154) personnel hours spent in administering the PRT. The sizable standard deviation of 154 personnel hours indicates that some commands spend well over 200 hours, whereas other commands spend only a few personnel hours conducting the PRT. This would be expected, considering that Navy command units vary in size from 10 or fewer to several thousand members.

Table 1

Physical Readiness Testing: Description of CFC's Responses

	<u>Percent</u>	<u>Mean</u>	<u>S.D.</u>
1. How often do individuals take the PRT each year?		1.79	0.93
0. Never	1.2		
1. Annually	40.2		
2. Twice a year	47.6		
3. Three times a year	0.0		
4. Four or more times a year	11.0		
2. What proportion of your command members actually take the PRT each year?		3.24	.84
0. Less than 25%	2.4		
1. 25-49%	1.2		
2. 50-74%	7.3		
3. 75-94%	47.6		
4. 95-100%	41.5		
3. Approximately what percent of the people at your command <u>DID NOT</u> take the last PRT for the following reasons?			
o Medical waiver	6.0		
o Pregnancy	1.6		
o TAD during testing	6.5		
o No show for testing	6.3		
o Other reasons	1.8		
4. Are there any incentives offered to your command members to pass the PRT at an "outstanding" level?		1.41	.49
1. No	59.0		
2. Yes	41.0		
5. Are there any incentives offered to your command members to pass the PRT at any other level or for showing big improvements?		1.19	.40
1. No	80.7		
2. Yes	19.3		
6. Are there any negative consequences for failing the PRT?		1.78	.42
1. No	22.0		
2. Yes	78.0		
7. How many personnel hours are spent in administering the Physical Fitness Test?	79.13	154.44	

Remedial Programs

As shown in Table 2, 78% of the CFCs listed at least one response to the question regarding what remedial fitness programs were available for those who failed the PRT. However, some responses (e.g., independent exercise; conducting a re-test of the PRT) might not reflect true remedial programs using a strict definition of the term. The most commonly reported programs could be characterized as: (a) exercise/physical training (67.5%), (b) diet/nutrition programs (20.5%), and (c) general health and physical readiness programs (9.6%), including those conducted by Counseling and Assistance Centers (CAACs) and Substance Abuse Counselors (SACs). On the average, the vast majority (about 85%) of CFCs considered these programs generally effective. These remedial programs were open to everyone (rather than restricted to those who failed the PRT) at 93% of the commands having such

Table 2

Remedial Programs: Description of CFC's Responses

	<u>Percent</u>	<u>Mean</u>	<u>S.D.</u>
8. What remedial programs are available for members who fail the PRT? (Percent of commands reporting at least one remedial program)	78.3		
o Exercise/Physical Training	67.5		
o Diet/Nutrition Programs	20.5		
o Miscellaneous HAPR Programs	9.6		
o Independent Exercise	6.0		
o Re-test of PRT	3.6		
o Health Club Membership	2.4		
o OPNAV Instruction	1.2		
o Miscellaneous/Uninterpretable	3.6		
Overall, how effective are these programs on a scale from 1 [Not Effective] to 3 [Very Effective]? (average of responses for all programs)		2.14	0.61
1. Not Effective	16.7		
2. Pretty Effective	59.1		
3. Very Effective	24.2		
9. Are the remedial programs:			
o Open to everyone? Yes	93.0		
o Required for those who failed the test? Yes	94.1		
o Attended by officers? Yes	59.1		

programs, and participation in the programs was required for those who failed the PRT at 94% of those commands. However, participants in the remedial programs were primarily enlisted personnel, as CFCs at only 59% of these commands reported that officers attended remedial programs.

Fitness Programs/Facilities

Table 3 summarizes CFC responses to questions about the availability of general physical fitness programs and facilities at the commands sampled. The most commonly cited fitness programs included (a) group sports (at 87.3% of commands), (b) counseling for use/abuse of alcohol (85.5%) and drugs (84.3%), and (c) blood pressure screening (70.7%). Somewhat less commonly available were group exercise activities (67.7%), weight control programs (64.6%), nutrition/diet counseling (61%), and command-provided time for independent exercise (61.8%). Less than half of the CFCs reported that their commands had readily available programs for smoking cessation (48.8%) or stress management (47.0%). Only slightly more than half (54%) of the commands often or regularly publicized the programs that were available.

Across all commands sampled, an average of 51 minutes was made available during the work day for individuals to exercise, and 22% of commands provided more than one hour during the work day for exercise. However, 25% of the commands did not allow any official work time for exercise, and another 12% of the commands allowed only 30 minutes or less for exercise. Only 40% of CFCs reported that competitive activities designed to encourage or increase physical fitness were arranged often or regularly. The most common CFC response (46.3%) regarding how many members of their commands exercised regularly was "about half of them;" 35.5% of CFCs estimated that "very few" members exercised regularly; and only 18.3% of CFCs estimated that "most" or "all" command members exercised regularly.

Another question asked whether fitness programs/activities were available to everyone or restricted to only those referred. At the vast majority of commands, these programs were available to anyone who wanted to participate. Programs which were most likely to have restricted participation included weight control programs (30.9% of commands restricted participation to those referred), nutrition/diet counseling (21.1%), drug (16.9%) and alcohol (15.3%) counseling, and blood pressure screening (13.6%).

A majority of CFCs also said that it was possible to participate in all these programs/activities during work hours. However, there were still a

Table 3

Available Fitness Programs/Facilities: Description of CFC's Responses

	<u>Percent</u>	<u>Mean</u>	<u>S.D.</u>
10. Which of the following are <u>readily available</u> <u>at your command</u> ?			
o Independent exercise (command-provided time for jogging, walking, etc.)	61.8		
o Group sports (softball, baseball, football, basketball, etc.)	87.3		
o Group exercise (jogging, aerobics, swimming, etc.)	67.7		
o Weight control (counseling, food workshops, behavior modification programs, etc.)	64.6		
o Nutrition/diet counseling (for people who are not necessarily trying to lose weight)	61.0		
o Stop smoking (education, nicotine gum, behavior modification, etc.)	48.8		
o Alcohol use/abuse counseling	85.5		
o Drug use/abuse counseling	84.3		
o Stress management	47.0		
o Blood pressure screening	70.7		
o Other	12.0		
11. How often are the available programs publicized?		2.46	1.12
0. Never	4.8		
1. Seldom	16.9		
2. Sometimes	24.1		
3. Often	36.1		
4. Regularly	18.1		
12. How often is competition arranged to encourage or increase physical fitness?		2.13	1.14
0. Never	6.0		
1. Seldom	27.7		
2. Sometimes	26.5		
3. Often	26.5		
4. Regularly	13.3		
13. How much official time is available during the work day for exercise? [average in minutes]		51.37	45.10
o No time	24.7		
o 30 minutes	11.7		
o 35-60 minutes	41.5		
o 75-90 minutes	15.6		
o 2 hours or more	6.5		

Table 3 (continued)

Available Fitness Programs/Facilities: Description of CFC's Responses

	<u>Percent</u>	<u>Mean</u>	<u>S.D.</u>
14. By your estimate, how many of your command members exercise regularly?		1.85	.77
0. None of them	0.0		
1. Very few of them	35.5		
2. About half of them	46.3		
3. Most of them	15.9		
4. All of them	2.4		
15. For the following programs, facilities, and equipment, is <u>anyone</u> able to participate or <u>only those referred</u> ; can personnel attend <u>during work time</u> ?			
	<u>Percent of CFC's who said:</u>		
	<u>Anyone</u>	<u>Only Referred</u>	<u>During Work</u>
o Independent exercise	100.0	0.0	62.0
o Group sports	100.0	0.0	52.1
o Group exercise	96.8	3.2	68.9
o Weight control	69.1	30.9	71.0
o Nutrition/diet counseling	78.9	21.1	78.2
o Stop smoking	97.7	2.3	75.0
o Alcohol use/abuse counseling	84.7	15.3	85.5
o Drug use/abuse counseling	83.1	16.9	85.3
o Stress management	95.6	4.4	65.2
o Blood pressure screening	86.4	13.6	78.2
16. What exercise facilities/equipment are available at your command? How often are they used, and how well are they maintained?			
	<u>(% Yes) Equipment Available</u>	<u>(Mean)^a How Often Used</u>	<u>(Mean)^b How well Maintained</u>
o Weight machines/free weights	93.3	2.80	4.04
o Softball diamond	78.9	2.67	4.29
o Volleyball court	69.1	2.17	4.14
o Fields for football or soccer	71.5	2.15	4.05
o Track or space for jogging/running	85.7	2.90	3.98
o Tennis, squash or racquetball courts	75.2	2.87	4.47
o Basketball court	86.5	2.91	4.34
o Golf course	43.7	2.86	4.51
o Swimming pool	70.0	2.68	4.47
o Bicycles	28.5	2.00	4.00
o Stationary bicycles	78.6	2.49	3.86
o Other	18.1	3.81	4.13

^a Based on a 5-point Likert-type scale from 1-Never to 5-Always.

^b Based on a 5-point Likert-type scale from 1-Not at all to 5-Very well.

Table 3 (continued)

Available Fitness Programs/Facilities: Description of CFC's Responses

	<u>Percent</u>	<u>Mean</u>	<u>S.D.</u>
17. Is there enough equipment available for all of the members who would like to exercise?		2.81	1.11
0. Never	4.9		
1. Rarely	8.6		
2. Sometimes	16.0		
3. Often	40.7		
4. Always	29.6		
18. Is the lunch break long enough to exercise, shower, and eat before returning to work?		2.21	1.24
0. Not at all	12.7		
1. Rarely	17.7		
2. Sometimes	16.5		
3. Most of the time	41.8		
4. Always	11.4		
19. How long does it take to get to the facilities/equipment used to exercise? [average in minutes]		7.97	4.98

number of commands that did not allow participation in many of these activities during the work day: 48% did not allow group sports, 38% did not allow independent exercise, 35% did not have stress management counseling, 31% did not have group exercise activities, 29% did not have weight control programs, and 25% did not have smoking cessation programs available during the work day.

The most commonly available exercise equipment/facilities, reported by at least three-fourths of the CFCs, included the following: weight machines or free weights (available at 93% of commands), basketball court (86.5% of commands), track or space for jogging/running (85.7%), softball diamond (78.9%), stationary bicycles (78.6%), and tennis, squash, or racquetball courts (available at 75.2% of commands). On the average, CFCs estimated that most of these facilities were used somewhat less than "sometimes," which was the midpoint anchor on a 5-point response scale from "never" to "always." CFCs indicated that facilities were maintained "pretty well" (i.e., mean of 4.19 on a 5-point response scale from "not at all well maintained" to "very well maintained"). Furthermore, 70% of the CFCs thought that there was "often" or "always" enough equipment available for all personnel who wanted to

exercise, whereas 14% of CFCs thought there was "never" or "rarely" enough equipment available. There was substantial variation across commands with regard to CFCs' ratings of whether lunch breaks were long enough to exercise, shower, and eat before returning to work. The length of the lunch break was rated as adequate "most of the time" or "always" by 53% of CFCs, while 47% of CFCs said the lunch break was "not at all," "rarely," or only "sometimes" long enough to incorporate exercise activities. CFCs estimated that it took an average of eight minutes (16 minutes round trip) to get to exercise facilities.

Command Smoking Policies

Table 4 summarizes CFCs' responses to several questions regarding smoking policy at their commands. According to the CFCs, 76% of the commands surveyed had restrictions on smoking. The vast majority of these involved restricting

Table 4
Smoking Policy: Description of CFC's Responses

	<u>Percent</u>	<u>Mean</u>	<u>S.D.</u>
20. Does your command have restrictions on smoking?			
Yes	75.6		
If yes, what type?			
o Designated areas	81.7		
o Designated times	1.7		
o Designated areas and times	6.7		
o Navy restrictions	8.3		
o Restrictions not enforced	1.7		
21. Are smoking restrictions carefully enforced?		3.56	1.35
0. Not at all	11.1		
1. Seldom	11.1		
2. Sometimes	22.2		
3. Frequently	22.2		
4. Always	33.3		
22. Does your command provide education about the health effects of smoking through the following?			
(Percent answering yes to at least one)	66.3		
o Lectures or classes	42.9		
o Pamphlets	57.0		
o Behavior modification programs	32.9		
o Plan of the Day	4.8		
o Other	4.8		

smoking to designated areas. However, only 56% of CFCs said these restrictions were "frequently" or "always" enforced. The other 44% of CFCs said the restrictions were "not at all," "seldom," or only "sometimes" enforced. A majority of commands (66%) provided education about the health effects of smoking through pamphlets (57%), lectures/classes (43%), behavior modification programs (33%), or other media (10%). About one-third of the CFCs (34%) indicated no smoking education activities at their commands.

Nutrition/Weight Control Programs

Table 5 summarizes CFCs' responses to questions about nutrition/weight control programs or activities available at their commands. Most (72%) commands provided some education about nutrition/weight control through pamphlets (63%), lectures/classes (47%), behavior modification programs (44%), or other media (11%). About 28% of the CFCs reported no nutrition or weight control educational activities at their commands.

The type of food readily available at commands was also of interest as a potential indicator of nutrition awareness at the command level. Categories of food rated as "always available" at over 45% of commands included: refined sugar products (always available at 67.5% of commands), salad bar (62.5%), high-fat dairy products (58.7%), fresh fruits (51.3), high-fat meats (48.8%), and butter/lard (46.3% of commands). Various recommended food categories⁵ rated as "rarely" or "not available" included: low-fat dairy products (rarely or not available at 31.3% of commands), polyunsaturated fats (26.3%), high fiber grains (21.3%), fresh vegetables (16.3%), fresh fruits (13.8%), salad bar (12.6%) and low-fat meats (12.5%). Dieter's portions were rarely or not available at 44.9% of commands. Most commands had vending machines that provided candy (81.9% of commands), chips (75.6%), cookies (68.3%), crackers (67.1%), and nuts (65.4%); but many fewer commands provided fresh fruit (16%), raisins/dried fruit (20.7%), granola snacks (35.4%), or fruit/vegetable juices (48.8%).

Top-Level Command Attitudes and Behaviors

Table 6 summarizes CFC responses to physical readiness-related questions about the command's commanding officer (CO) and executive officer (XO). About 17% of the CFCs thought their COs did not exercise regularly, did not appear physically fit, were overweight, and did not provide strong support for either the CFC or the physical readiness program in general. Almost 4% of the COs used smokeless tobacco and 21% smoked cigarettes, cigars, or pipes; only 48%

Table 5

Nutrition/Weight Control: Description of CFC's Responses

22. Does your command provide education about nutrition/weight control through the following? (Percent answering yes to at least one)					<u>Percent</u>			
					72.3			
o Lectures or classes					47.4			
o Pamphlets					62.8			
o Behavior modification programs					44.0			
o Plan of the Day					4.8			
o Other					6.0			
23. At your command eating facilities, what types of food are available?								
	Not				Always			
<u>Percent of CFC's marking:</u>	<u>Avail.</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Avail.</u>	<u>Mean</u>	<u>SD</u>	
	(1)	(2)	(3)	(4)	(5)			
a. High-fat meats	8.8	2.5	3.8	36.3	48.8	4.14	1.19	
b. Low-fat meats	7.5	5.0	33.8	42.5	11.3	3.45	1.02	
c. Deep-fried foods	10.0	0.0	6.3	42.5	41.3	4.05	1.18	
d. High-fat dairy products	8.8	2.5	8.8	21.3	58.7	4.19	1.24	
e. Low-fat dairy products	15.0	16.3	21.3	25.0	22.5	3.24	1.37	
f. Butter/lard	8.8	6.3	12.5	26.2	46.3	3.95	1.28	
g. Polyunsaturated fats	12.5	13.8	26.2	28.8	18.8	3.27	1.27	
h. Eggs/egg dishes	8.8	2.5	18.8	28.8	41.3	3.91	1.22	
i. Fresh vegetables	11.3	5.0	15.0	30.0	38.8	3.80	1.32	
j. Fresh fruits	8.8	5.0	8.8	26.2	51.3	4.06	1.27	
k. Salad bar	8.8	3.8	6.3	18.8	62.5	4.22	1.26	
l. High fiber grains	10.0	11.3	22.5	15.0	41.3	3.66	1.38	
m. Refined sugar products	7.5	1.3	2.5	21.3	67.5	4.40	1.13	
n. Dieter's portions	23.1	21.8	14.1	14.1	26.9q	3.00	1.55	
24a. Are there vending machines on-site?					<u>Percent yes:</u>	93.9		
24b. If yes, do they offer...?								
a. Candy bars; candies						81.9		
b. Cookies						68.3		
c. Fresh fruit						16.0		
d. Chips						75.6		
e. Granola snacks						35.4		
f. Crackers						67.1		
g. Nuts						65.4		
h. Raisins; dried fruit						20.7		
i. Sandwiches						34.6		
j. Fruit or vegetable juices						48.8		
k. Regular sodas						93.9		
l. Diet sodas						91.4		
m. Coffee or tea						37.0		
n. Decaffeinated coffee or tea						15.7		
o. Cigarettes						48.7		
p. Others						50.0		

Table 6

Top-Level Command Attitudes and Behaviors: Description of CFC's Responses

25. The following questions ask about the attitudes and behaviors of your command's Commanding Officer (CO) and Executive Officer (XO).

Percent of CFC's marking:	Commanding Officer			Executive Officer		
	No	Yes	Don't Know	No	Yes	Don't Know
a. Do they exercise regularly?	16.9	61.4	21.7	22.0	53.7	24.4
b. Do they appear physically fit?	16.9	79.5	3.6	24.4	70.7	4.9
c. Are they overweight?	77.1	16.9	6.0	78.0	17.1	4.9
d. Do they smoke cigarettes, cigars, or pipes?	78.6	21.4	0.0	77.5	22.5	0.0
e. Do they use smokeless tobacco?	79.5	3.6	16.9	80.5	2.4	17.1
f. Do they strongly encourage exercise of command members?	22.2	74.1	3.7	21.3	72.5	6.3
g. Do they strongly encourage weight control for those who need it?	15.7	81.9	2.4	13.4	82.9	3.7
h. Do they actively discourage smoking among command members?	34.9	48.2	16.9	45.1	36.6	18.3
i. Do they provide strong support for the Command Fitness Coordinator?	16.9	74.7	8.4	17.1	74.4	8.5
j. Do they encourage exercise during the work day?	37.3	54.2	8.4	35.9	53.4	9.9
k. Do they strongly support the physical readiness program?	16.9	72.3	10.8	19.5	70.7	9.8

of them actively discouraged smoking among command members. Whereas CFCs felt that 74% of the COs strongly encouraged exercise in general, and 82% strongly encouraged weight control for those who need it, only 54% of COs encouraged exercise during the work day.

CFC ratings of their XOs paralleled the ratings for the COs, indicating that 17-24% of the XOs did not exercise regularly, did not appear physically fit, were overweight, and did not provide strong support for either the CFC or the physical readiness program. Just over 2% of the XOs used smokeless tobacco and about 23% smoked cigarettes, cigars, or pipes; only 37% of them

actively discouraged smoking among command members. Whereas CFCs felt that 73% of the XO's strongly encouraged exercise in general, and 83% strongly encouraged weight control for those who need it, only 53% of the XO's encouraged exercise during the work day.

Ship-Shore Community Comparisons

Commands were classified according to UICs into one of two communities: ship (surface ships and submarines) or shore (land, air, and mobile units). Analyses of variance yielded several statistically significant differences between the groups (see Table 7). The shore commands were more likely to: (a) have exercise programs (summing independent exercise, group sports, and group exercise) more readily available at their commands, (b) provide exercise equipment and facilities, (c) provide more time during the work day for exercise, (d) report a larger proportion of members who exercise

Table 7

Significant HAPR Implementation Differences Between Ship and Shore Communities

<u>Variable</u>	<u>Response Range</u>	<u>N</u>	<u>SHIP (mean)</u>	<u>SHORE (qmean)</u>	<u>F</u>	<u>P</u>
Exercise programs available at command	0-3	83	1.71	2.25	5.27	.02
Time (in minutes) available during day for exercise	0-300	77	34.33	57.77	4.30	.04
Proportion of command members that exercise regularly	0-4 (None-All)	82	1.54	1.98	5.88	.02
Exercise facilities/equipment provided	1-11	82	5.17	8.48	21.90	.00
Frequency of equipment utilization	1-5 (Never-Always)	74	3.29	3.68	4.16	.05
Enough exercise equipment available	0-4 (Never-Always)	81	2.35	3.00	6.07	.02
Command has smoking restrictions	1-2 (No-Yes)	82	1.61	1.81	3.85	.05
Commanding officer does not smoke or actively discourages smoking	1-2 (No-Yes)	72	1.70	1.91	5.00	.03

regularly, (e) report that exercise equipment was used more frequently, and that enough equipment was available for all members who wanted to use it, (f) have smoking restrictions, and (g) have a commanding officer who either did not smoke or who actively discouraged smoking.

Summary and Recommendations

The primary purpose in conducting the Command Fitness Coordinator survey was to gather information on the implementation of the Health and Physical Readiness Program at the command level. Thus, the primary focus of this survey was on factors related to physical readiness testing, remedial programs, and the availability of fitness programs and facilities at randomly selected Navy commands. Responses from participating CFCs indicated that all but one of the commands conducted the required PRT, and most had established negative consequences for anyone failing the test. These usually included, but were not limited to, required participation in a remedial fitness program; nevertheless, more than 20% of the CFCs reported no remedial programs whatsoever at their commands.

The most commonly available exercise facilities were weight machines or free weights, basketball courts, track or space for running, softball diamond, stationary bicycles, and racquet sport courts (in that order), and the facilities were usually well-maintained. In addition, the vast majority of commands reported having one or more readily available physical exercise program or activity (including group sports). Yet most facilities were used infrequently, and only 18% of the CFCs estimated that "most" or "all" command personnel exercised regularly. This might be partly because more than one-third of the commands allowed little or no time for exercise during the work day, and half of the CFCs did not believe that lunch breaks were long enough for exercising, showering, and eating before returning to work.

While HAPR differences between the ship and shore communities could suggest a greater commitment to health and fitness among shore commands, most differences were likely due to more material and circumstantial limitations in the shipboard environment. This would not be true for smoking, however. Smoking restrictions and a "smoke-free" CO were more often reported among shore commands than among ships. Command-level smoking policies are particularly salient in light of the goal of a smoke-free Navy by the year 2000. Altogether, about three-fourths of the commands surveyed had smoking restrictions, but nearly half of the CFCs felt that these restrictions were

not regularly enforced. Moreover, smoking education was lacking at about one-third of the commands.

Recommended food types such as low-fat dairy products, polyunsaturated fats, and high fiber grains were rarely or never available at over 20% of the commands. Furthermore, CFCs indicated that dieter's portions were available at only half of the commands. Command vending machines were much more likely to provide high-sugar, high-fat snacks than more healthful items such as fresh fruit or granola products. Nutrition education was lacking at more than one-fourth of the commands surveyed.

In general, the CFC survey revealed fairly widespread implementation of a variety of health promotion programs and activities. However, HAPR efforts could be improved in several respects: (1) Expand remedial programs for individuals who fail the PRT; (2) Provide time during the work day (perhaps in the form of an extended lunch hour) for exercise; (3) Enforce smoking restrictions at all commands; (4) Offer more nutritious foods in mess sites and vending machines. Perhaps most important for the implementation and success of the HAPR programs are the attitudes and behaviors of top command leaders. About one-fifth of the CFCs indicated that their COs and XO's set poor examples and were non-supportive of HAPR efforts. Strong leadership from the top in setting health and physical readiness policy as well as in providing health-conscious and fitness-oriented examples will likely remain a primary determinant of both improvements in and maintenance of high levels of physical readiness among Navy personnel.

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Appendix A

COMMAND FITNESS COORDINATOR SURVEY

Navy-Wide Longitudinal Study of Health and Physical Readiness

NAVAL HEALTH RESEARCH CENTER
P.O. BOX 85122
SAN DIEGO, CALIFORNIA 92138

The first section includes questions about physical fitness testing procedures at your command and remedial programs available for people who fail the test. Please answer the questions by circling the appropriate number or writing in your responses.

1. How often do individuals take the PFT each year?

NEVER	ANNUALLY	TWICE A YEAR	3 TIMES A YEAR	4 OR MORE TIMES A YEAR
0	1	2	3	4
2. What proportion of your command members actually take the PFT each year?

LESS THAN 25%	25 - 49%	50% - 74%	75 - 94%	95 - 100%
0	1	2	3	4
3. Approximately what percent of the people at your command DID NOT take the last PFT for the following reasons?

_____ % MEDICAL WAIVER	_____ % PREGNANCY	_____ % IAD DURING TESTING
_____ % NO SHOW FOR TESTING	_____ % OTHER REASONS	
4. Are there any incentives offered to your command members to pass the PFT at a "outstanding" level?
1. NO 2. YES (IF YES, PLEASE SPECIFY:) _____
5. Are there any incentives offered to your command members to pass the PFT at any other level or for showing big improvements? 1. NO 2. YES (IF YES, PLEASE SPECIFY:) _____
6. Are there any negative consequences for failing the PFT?
1. NO 2. YES (IF YES, PLEASE DESCRIBE:) _____
7. How many personnel hours are spent in administering the Physical Fitness Test? _____ HOURS
8. What remedial programs are available for members who fail the PFT, and how effective are the programs?

	NOT EFFECTIVE	PRETTY EFFECTIVE	VERY EFFECTIVE
<u>PROGRAM (Describe briefly)</u>			
a. _____	1	2	3
b. _____	1	2	3
c. _____	1	2	3
d. _____	1	2	3
9. Are the remedial programs:

OPEN TO EVERYONE?	REQUIRED FOR THOSE WHO FAILED THE TEST?	ATTENDED BY OFFICERS?
No Yes	No Yes	No Yes
1 2	1 2	1 2

In the next section, we are interested in finding out what programs, facilities, etc. are available at your command.

10. Please indicate which of the following are readily available at your command.

- | NO | YES | |
|----|-----|--|
| 1 | 2 | Independent exercise (command-provided time for jogging, walking, etc.) |
| 1 | 2 | Group sports (softball, baseball, football, basketball, etc.) |
| 1 | 2 | Group exercise (jogging, aerobics, swimming, etc.) |
| 1 | 2 | Weight control (counseling, food workshops, behavior modification programs, etc.) |
| 1 | 2 | Nutrition/diet counseling (for people who are not necessarily trying to lose weight) |
| 1 | 2 | Stop smoking (education, nicotine gum, behavior modification, etc.) |
| 1 | 2 | Alcohol use/abuse counseling |
| 1 | 2 | Drug use/abuse counseling |
| 1 | 2 | Stress management |
| 1 | 2 | Blood pressure screening |
| 1 | 2 | Other (please specify) _____ |
| 1 | 2 | Other (please specify) _____ |

11. How often are the available programs publicized?

NEVER	SELDOM	SOMETIMES	OFTEN	REGULARLY
0	1	2	3	4
12. How often is competition arranged to encourage or increase physical fitness?

NEVER	SELDOM	SOMETIMES	OFTEN	REGULARLY
0	1	2	3	4
13. How much official time is available during the work day for exercise? _____ MINUTES
14. By your estimate, how many of your command members exercise regularly?

NONE OF THEM	VERY FEW OF THEM	ABOUT HALF OF THEM	MOST OF THEM	ALL OF THEM
0	1	2	3	4

15. For each of the following programs, facilities, and equipment, please circle the appropriate response to indicate who is eligible to participate and whether or not command personnel are permitted to attend during work time. If your command does not provide the program, facility, or equipment listed, please circle "NA".

	WHO IS ELIGIBLE TO PARTICIPATE?			CAN PERSONNEL ATTEND DURING WORK TIME?		
	"NA"	ANYONE	ONLY THOSE REFERRED	"NA"	NO	YES
Independent exercise	0	1	2	0	1	2
Group sports	0	1	2	0	1	2
Group exercise	0	1	2	0	1	2
Weight control	0	1	2	0	1	2
Nutrition/diet counseling	0	1	2	0	1	2
Stop smoking	0	1	2	0	1	2
Alcohol use/abuse counseling	0	1	2	0	1	2
Drug use/abuse counseling	0	1	2	0	1	2
Stress management	0	1	2	0	1	2
Blood pressure screening	0	1	2	0	1	2
Other (please specify) _____	0	1	2	0	1	2
Other (please specify) _____	0	1	2	0	1	2

16. Which of these exercise facilities/equipment are available at your command? How often are equipment or facilities used, and how well are they maintained? Circle the three appropriate responses for each type of equipment/facility.

	Is the necessary equipment provided? (1=NO, 2=YES)		How often is it used? (0=NA, 1=Never, 2=Rarely, 3=Sometimes, 4=Often 5=Always)					How well is it maintained? (0=NA, 1=Not at all, 2=Not very well, 3=Moderately well, 4= Pretty well, 5=Very well)						
Weight machines/free weights	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Softball diamond	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Volleyball court	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Fields for football or soccer	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Track or space for jogging/running	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Tennis, squash or racquetball courts	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Basketball court	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Golf course	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Swimming pool	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Bicycles	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Stationary bicycles	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Other _____	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Other _____	1	2	0	1	2	3	4	5	0	1	2	3	4	5
Other _____	1	2	0	1	2	3	4	5	0	1	2	3	4	5

17. Is there enough equipment available for all of the members who would like to exercise?

NEVER RARELY SOMETIMES OFTEN ALWAYS
0 1 2 3 4

18. Is the lunch break long enough to exercise, shower, and eat before returning to work?

NOT AT ALL RARELY SOMETIMES MOST OF THE TIME ALWAYS
0 1 2 3 4

19. How long does it take to get to the facilities/equipment used to exercise? _____ MINUTES

20. Does your command have restrictions on smoking? 1. No 2. Yes If yes, please briefly describe:

21. Are restrictions carefully enforced? 1. Not at all 2. Seldom 3. Sometimes 4. Frequently 5. Always

22. Does your command provide education about the health effects of smoking or about nutrition/weight control through...?

	Smoking		Nutrition/Weight	
	No	Yes	No	Yes
a. Lectures or classes	1	2	1	2
b. Pamphlets	1	2	1	2
c. Behavior modification programs	1	2	1	2
d. Other (please specify) _____				

23. In the on-site eating facilities at your command, what types of food are available?

	Not Available	Rarely	Sometimes	Often	Always Available
a. High-fat meats (e.g., hamburger, bacon, sausage).	1	2	3	4	5
b. Low-fat meats (e.g., chicken, fish, turkey).	1	2	3	4	5
c. Deep-fried foods (e.g., french fries, fried chicken, fried fish; potato chips).	1	2	3	4	5
d. High-fat dairy products (e.g., whole milk, cream, cheeses, ice cream).	1	2	3	4	5
e. Low-fat dairy products (e.g., low-fat or skim milk, yogurt, low-fat cottage cheese).	1	2	3	4	5
f. Butter or food cooked with lard (e.g., refried beans, some fried or baked foods, pastries, donuts).	1	2	3	4	5
g. Polyunsaturated fats (e.g., soft margarine, vegetable oil dressings, nuts).	1	2	3	4	5
h. Eggs or egg dishes (quiche, egg salad, french toast).	1	2	3	4	5
i. Fresh vegetables (e.g., raw, steamed, stir fry).	1	2	3	4	5
j. Fresh fruits.	1	2	3	4	5
k. Salad bar.	1	2	3	4	5
l. High fiber grains (e.g., whole wheat breads, cereals).	1	2	3	4	5
m. Refined sugar products (e.g., cake, pie, cookies, candy).	1	2	3	4	5
n. Dieter's portions (i.e., smaller servings of food).	1	2	3	4	5

24. Are there vending machines located on-site?

1. No 2. Yes

If yes, what do they offer?

No Yes

- a. Candy bars; candies. 1 2
- b. Cookies; cakes. 1 2
- c. Fresh fruit (e.g., apples, oranges). 1 2
- d. Chips (e.g. potato chips; corn chips). 1 2
- e. Granola snacks or "trail mix." 1 2
- f. Crackers. 1 2
- g. Nuts. 1 2
- h. Raisins; dried fruit. 1 2
- i. Sandwiches. 1 2
- j. Fruit or vegetable juices. 1 2
- k. Regular sodas. 1 2
- l. Diet sodas. 1 2
- m. Coffee or tea. 1 2
- n. Decaffeinated coffee or tea. 1 2
- o. Cigarettes. 1 2
- p. Others (specify): _____

25. The following questions ask about the attitudes and behaviors of your command's CO and XO.

	CO			XO		
	No	Yes	Don't Know	No	Yes	Don't Know
a. Do they exercise regularly?	1	2	3	1	2	3
b. Do they appear physically fit?	1	2	3	1	2	3
c. Are they overweight?	1	2	3	1	2	3
d. Do they smoke cigarettes, cigars, or pipes?	1	2	3	1	2	3
e. Do they use smokeless tobacco?	1	2	3	1	2	3
f. Do they strongly encourage exercise of command members?	1	2	3	1	2	3
g. Do they strongly encourage weight control for those who need it?	1	2	3	1	2	3
h. Do they actively discourage smoking among command members?	1	2	3	1	2	3
i. Do they provide strong support for the Command Fitness Coordinator?	1	2	3	1	2	3
j. Do they encourage exercise during the work day?	1	2	3	1	2	3
k. Do they strongly support the physical readiness program?	1	2	3	1	2	3

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